ENVIRONMENTAL ASSESSMENT

OPERATION OF THE KLAMATH PROJECT IN RESPONSE TO CRITICAL DRY CONDITIONS DURING 2001

AN ASSESSMENT OF ENVIRONMENTAL EFFECTS THAT MAY RESULT FROM CRITICAL DRY CONDITIONS DURING 2001AS THEY RELATE TO OPERATION OF THE KLAMATH PROJECT.

Prepared by:

United States Department of the Interior
Bureau of Reclamation
Mid-Pacific Region
Klamath Basin Area Office
Klamath Falls, Oregon

April 6, 2001

NEED FOR THE PROPOSAL

Background of Present Situation

Weather and hydrological conditions during late 2000 and early 2001 in south-central Oregon and northern California have resulted in a critically dry[1] situation. As of April 1, 2001, lack of seasonal precipitation and early runoff forecasts indicate that projected inflow to Upper Klamath Lake will be significantly reduced during the period of April to September 2001[2]. The Natural Resource Conservation Service (NRCS) stream flow forecast (at 70% exceedence) projects inflow to Upper Klamath Lake to be 21 percent of average, or 108,000 acre-feet. Normal inflow is approximately 508,000 acre-feet. As of early April, record low precipitation and snow water amounts are occurring at SNOTEL sites in the Klamath Basin. Precipitation in Klamath Falls, Oregon for the water year has fallen to 32 percent of average, or 3.02 inches. This water year is comparative to the extreme drought year of 1977.

This situation will affect operation of the Klamath Project (Project), a Federal reclamation project authorized in 1905, during the 2001 irrigation season (April to September) and possibly longer if dry conditions persist. The Project is owned and operated by the Bureau of Reclamation (Reclamation). It is located in the Upper Klamath basin in Klamath County in south-central Oregon, and Modoc and Siskiyou Counties in northern California. Project facilities have been constructed and operated by Reclamation since 1906[3]. Upper Klamath Lake is the primary water storage feature of the Project.

Reclamation has certain obligations to holders of rights to waters in the Klamath and Lost River Basins[4] as they pertain to operation of the Project. The holders of those rights are the Klamath Project water users; the Upper Klamath, Lower Klamath, Tule Lake and Clear Lake National Wildlife Refuges; and the Klamath, Yurok and Hoopa Tribes. None of these rights to the waters of the Klamath and Lost River have been quantified. The Project's 1905 water rights are junior to the reserved water rights of the Tribes but senior to the reserved water rights of the refuges. Reclamation's obligations are to Project water users, refuges, the Tribes and the Endangered Species Act. Those obligations are explained in detail in the 1995 Solicitor's memorandum previously referenced.

Since 1995, Reclamation has operated the Project in accordance with an annual operations plan, which run from April 1 to March 31 of the succeeding year. The present plan expires on March 31, 2001. All plans since 1995 have described Project operation during "above average" water years.

Reclamation is presently engaged in formal consultation under Section 7 of the Endangered Species Act with both the U.S. Fish and Wildlife Service (Service) and National Marine Fisheries Service (NMFS). The action under consultation is ongoing operation of the Project. Those consultations have recently yielded final biological opinions (B.O.) from those agencies regarding the effect of the Project on the

---

[1] Critical dry has two definitions that are relevant to Project operation. First, it is defined as the forecasted inflows to Upper Klamath Lake for the period of April to September. Inflows less than 185,000 acre-feet are defined as critical dry. Second, it is defined as the precipitation in Klamath Falls during February and March. Precipitation during this period establishes the antecedent conditions for irrigation demand on Project lands in the Klamath Basin.

[2] Reclamation. 2001. Klamath Basin Hydrologic Update - March 22, 2001. Klamath Basin Area Office. Klamath Falls, Oregon.

[3] Bureau of Reclamation (Reclamation). 2000. Klamath Project Historic Operation. Mid-Pacific Region, Klamath Basin Area Office, Klamath Falls, Oregon. November 2000.

[4] U.S. Department of the Interior. 1995. Memorandum dated July 22, 1995 describing Certain Legal Rights and Obligations related to the U.S. Bureau of Reclamation, Klamath Project for Use in Preparation of the Klamath Project Operations Plan. Regional Solicitor, Pacific Southwest Region. Sacramento, California.

endangered Lost River and shortnose suckers[5] found in Upper Klamath Lake, and the threatened coho salmon[6] found in the Klamath River downstream from the Project. Those final B.O.'s recommend certain minimum Upper Klamath Lake elevations and Klamath River flows. Reclamation has completed preliminary Project operation simulations using the Service's lake elevations and NMFS's recommended river flows. The results of those simulations show that in this critical dry year there would be insufficient storage and inflow to Upper Klamath Lake to simultaneously meet lake elevations and the river flows, even without any Project agricultural or refuge deliveries.

On March 2 , 2001, the Klamath Basin Area Manager sent a letter to Project water users notifying them that Project water is not available for use until such time as the 2001 Operations Plan or other such written notification is completed. This notification was given anticipating severe shortages of Project water. On March 28, 2001, Oregon Governor John Kitzhaber signed an executive order declaring a state of drought emergency in Klamath County. He also sent a letter to U.S. Secretary of Agriculture Ann Veneman asking for a natural resource disaster declaration for losses incurred because of the drought.

The Present Situation

The dilemma Reclamation presently faces is how to meet its obligations to the holders of rights to waters of the Klamath River and Lost River (water users, Tribes and refuges) and operate the Klamath Project to comply with the Endangered Species Act (ESA) by meeting certain minimum lake elevations in Upper Klamath Lake and flows in the Klamath River. The projected inflow shortage to Upper Klamath Lake this year resulting from the critical dry conditions, when combined with the Endangered Species Act obligations (as defined in the recent final B.O.'s), would result in little or no water being available in 2001 to irrigate lands (both agricultural and refuges) that receive Project water.

What is being Proposed?

Reclamation has developed an annual operations plan for 2001 which includes Upper Klamath Lake elevations and Klamath River flows which are the result of intensive working sessions by technical specialists and representatives of numerous agencies within the U.S. Department of the Interior, and includes the NMFS. This proposal is intended to represent the least damaging practicable scenario for Project operations in response to the critically dry conditions this year. In this EA, Reclamation considers several alternative approaches or scenarios for Project operation that have been considered as frameworks for development of the 2001 annual operations plan. Several factors (such as the extremely dry conditions, the requirements being proposed for protection of threatened and endangered fishes, the imminent and the critical nature of the operational effects that would follow implementation of the plan, however constituted), have combined to make annual operations plan development very difficult. Reclamation is striving to develop a reasonable practicable alternative for operation in 2001.

Why is a Proposal Needed?

The current annual operations plan expires on March 31, 2001. A new plan is needed to provide a framework for Project operation for the period of April 1, 2001 to March 31, 2002. A proposal is needed to allay uncertainty regarding availability, or unavailability, of Project water for agricultural

[5] U.S. Fish and Wildlife Service. 2001. March 13, 2001 Draft Biological/Conference Opinion on Long-term Operation of the Klamath Project. Klamath Falls, Oregon.

[6] National Marine Fisheries Service. 2001. Draft Biological Opinion on Ongoing Klamath Project Operation. Long Beach, California.

water users and national wildlife refuges.

Issues/Resources Relevant to the Action

The following issues/resources are relevant to the proposal and are addressed to the extent possible in this EA. The EA assesses the effects of the action and alternatives on threatened and endangered species, Klamath Basin Indian Tribes, agricultural water users and national wildlife refuges.

Purpose of the Environmental Assessment

The purpose of this environmental assessment (EA) is to briefly describe the environmental effects of implementing the alternatives, if any. Reclamation may prepare an EA at any time to assist agency planning and decisionmaking (40 CFR 1501.3(b)).

ALTERNATIVES

Introduction

Reclamation considered alternative courses of action in the face of the competing demands for a extremely limited resource this year. Reclamation explored alternative ways to allocate the available water supply in a way that partially addresses all of the competing demands for the limited resource. This approach was used in an attempt to develop an alternative that meets the intended and authorized purposes of the Project, which are to drain and reclaim lake bed lands of the Lower Klamath and Tule Lakes, to store water of the Klamath and Lost Rivers (including storage of storage in Lower Klamath and Tule Lakes), to divert irrigation supplies, and to control flooding of the reclaimed lands[7].

Reclamation's attempts to develop an alternative(s) for action that meets the intended purposes of the Project appear heavily constrained because the available water supply is extremely limited in 2001. The primary elements considered in formulating the alternatives that follow are varying combinations of Upper Klamath lake elevations and Klamath river flows. The following alternative courses of action have been developed and considered.

Alternatives Considered

Operate the Klamath Project During 2001 to Meet Reclamation's Endangered Species Act, Tribes, Project Water Users and Refuges Obligations (Proposed Operation) -- this is the preferred alternative.

Under this alternative, Reclamation would operate the Klamath Project during 2001 in a manner that addresses its obligations, to the extent practicable during this critically dry year, under the Endangered Species Act, and to the Klamath Basin Indian Tribes, Project water users and national wildlife refuges.

Operate the Klamath Project to Meet Final 2001 Biological Opinion Requirements (ESA Operation)

Under this alternative, Reclamation would operate the Klamath Project to meet the Upper Klamath Lake elevations and Klamath River flows specified by the Endangered Species Act (ESA) and determined by the Service and NMFS in their respective final B.O.'s. Any Project water available after meeting those requirements would be used to make agricultural and refuge deliveries.

Operate the Klamath Project to Make Agricultural and Refuge Deliveries in 2001 Consistent with Historic Operation (Historic Operation).

Under this alternative, Reclamation would operate the Klamath Project in 2001 in a manner consistent with its historic operation in a critical dry year. Such operation would result in maintenance of Upper Klamath Lake elevations and Klamath River flows similar to the historic

[7] Bureau of Reclamation (Reclamation). 2000. Klamath Project Historic Operation. Mid-Pacific Region, Klamath Basin Area Office, Klamath Falls, Oregon. November 2000.

range of elevations and flows resulting from the Project during the period of 1961 through 2000. Project water would be available for agricultural and refuge deliveries. Project water deliveries in 2001 may be subject to conditions of the Project's Drought Plan

Operate the Klamath Project to Make Limited Agricultural and Refuge Deliveries in 2001 (Limited Operation).

Under this alternative, Reclamation would operate the Klamath Project from April to October 2001 in a manner that allocates a limited supply of water (approximately 330,000 acre-feet) for diversion to the Project for agricultural and refuge use, while attempting to maintain Upper Klamath Lake elevations and Klamath River flows within minimally biologically acceptable ranges for protection of endangered fishes and tribal trust resources. This limited allocation is approximately 60-70% of historical demand and is based upon the estimated volume of water needed to maintain a viable agricultural economy this year. The allocation is based upon distribution to Project lands as follows:

"A" land	= 2.5 acre-feet/acre
"B" land	= 1.0 acre-feet/acre
Previously-irrigated (winter) lands	= 0.5 acre-feet/acre
"C" land	= 0.0 acre-feet/acre
Refuge lands	= 2,000 acre-feet/month (Apr-Oct 2001)

The allocations are only for the period of April through October 2001. The operation after this period would be adaptive and responsive to subsequent meteorological and hydrological conditions. At the end of October 2001, a supplement to the annual operations plan would be prepared with a decision regarding availability of Project water for fall refuge flooding and winter irrigation use.

Do Not Operate the Klamath Project to Make Agricultural and Refuge Deliveries in 2001 (Restricted Operation).

Under this alternative, Reclamation would restrict operation of the Klamath Project and not deliver Project water to agricultural users and refuges due to unavailability of water. Maintenance of Upper Klamath Lake elevations and Klamath River flows needed to protect endangered fish would be determined by the Service, NMFS and the Tribes. ESA elevation and flow requirements would be adjusted in response to water available during this critically dry year. Stored Project water in the Lost River basin reservoirs would be used to meet downstream ESA flow requirements in the Klamath River.

Elements Common to All Alternatives

The following elements of Project operation would be common to all alternatives:

Demand Reduction Program - Reclamation will conduct a pilot demand reduction program for one year (from March 23, 2001 to March 22, 2002). It will enter into contracts with willing participants to forego use of surface water for irrigation of lands. The most probable magnitude of this program would be 25,000-50,000 acres.

Water Acquisition Program - Reclamation will acquire a limited supply of groundwater from willing sellers during 2001 for Project use. The most probable magnitude of this program would be acquisition of up to 37,000 acre-feet of pumped groundwater.

Lost River Water - Stored and available Project water from the Lost River basin (Gerber and Clear Lake Reservoirs) will be released to offset Upper Klamath Lake/Klamath River shortages. The quantity of water is estimated to be approximately 50,000 acre-feet.

Table 1 displays the Upper Klamath Lake elevations and Klamath River flows for each alternative considered. The elevation and flow is shown for each period of time -- these time steps are incorporated into the Project operation simulation model.

TABLE 1
COMPARISON OF UPPER KLAMATH LAKE ELEVATIONS AND KLAMATH RIVER FLOWS
UNDER FIVE ALTERNATIVES FOR OPERATION OF THE KLAMATH PROJECT IN RESPONSE TO CRITICAL DRY CONDITIONS IN 2001

	Upper Klamath Lake Elevations (feet)					Klamath River Flows (cubic feet per second)				
	Proposed Operation [1]	ESA Operation [2]	Historic Operation	Limited Operation [3]	Restricted Operation [4]	Proposed Operation	ESA Operation	Historic Operation	Limited Operation	Restricted Operation
April 1 - 15	4142.5 (Apr 15)	4142.5 (Apr 15)	-	-	4142.5 (Apr 15)	1700	1700	569	-	1850
April 16 - 30	-	-	4141.9 (Apr 30)	4142.59 (Apr 30)	-	1700	1700	574	1213	1850
May 1 - 15	-	-	-	-	-	1700	1700	525	-	1850
May 16 - 31	4141.8 (May 31)	-	4141.35 (May 31)	4141.48 (May 31)	4141.8 (May 31)	1700	1700	501	1103	1850
June 1 - 15	-	4142.5 (June 1)	-	-	-	2100	2100	476	-	1850
June 16 - 30	-	-	4140.13 (June 30)	4140.39 (June 30)	-	1700	1700	536	851	1850
July 1 - 15	4140.0 (July 15)	4141.5 (July 15)	-	-	4140.0 (July 15)	1000	1000	429	-	1000
July 16 - 31	-	-	4138.91 (July 31)	4139.33 (July 31)	-	1000	1000	427	688	1000
August	-	4141.0 (Aug 15)	4137.62 (Aug 31)	4138.48 (Aug 31)	-	1000	1000	398	651	1000
September	4139.0 (Sept 30)	4140.5 (Sept 15)	4137.14 (Sept 30)	4138.03 (Sept 30)	4139.0 (Sept 30)	1000	1000	538	651	1000
October	-	4140.0 (Oct 15)	4137.26 (Oct 31)	4137.73 (Oct 31)	-	Not avail. [5]	Not avail.[5]	904	651	1300
November	-	-	4138.06 (Nov 30)	Not avail. [6]	-	"	"	909	Not avail. [6]	1300
December	-	-	4138.93 (Dec 31)	"	-	"	"	914	"	1300
January	-	4141.0 (Jan 1)	4140.14 (Jan 31)	"	-	"	"	1011	"	1300
February	4141.5 (Feb 15)	4142.0 (Feb 15)	4141.15 (Feb 28)	"	4141.5	"	"	525	"	1300
March	4142.0 (Mar 15)	4142.0 (Mar 15)	4142.0 (Mar 30)	"	-	"	"	501	"	1300

[1] - These elevation/flows are in the 2001 Annual Operations Plan.

[2] - These elevations/flows are in the respective final B.O.'s from the Service and NMFS.

[3] - The elevations/flows were developed by Reclamation for a March 26, 2001 meeting with Klamath Basin Indian Tribes.

[4] - The elevations/flows were developed in meeting between Service, NMFS, Klamath Basin Indian Tribes and Reclamation on March 28, 2001.

[5] - NMFS will provide the flows for October 2001 through March 2002 through further ESA consultation. For purposes of the 2001 Plan, Reclamation used 1300 cfs for Oct-Mar.

[6] - Elevation/flows under this alternative were developed only for the period of April through October 2001.

EFFECTS OF THE ALTERNATIVES

The significant resources/issues described in Chapter 1 and determined to be affected by the alternatives have been previously described in depth in the Klamath Project 1998 Operations Plan Environmental Assessment/Plan[8]. The description of those resources/issues is incorporated by reference in this EA. This chapter describes the environmental effects of implementing the alternatives. The effects are displayed in Table 2. The table summarizes and displays the effects to facilitate comparison of the alternatives.

Effects on Threatened and Endangered Species

Proposed Operation - Under this alternative, operation of the Project during 2001 (April to October) to meet its intended purposes would jeopardize the continued existence of the Lost River and shortnose suckers, and coho salmon. Project operation would not jeopardize the continued existence of the bald eagle. The Reasonable and Prudent Alternative (RPA) described in the final B.O.'s, which is intended to avoid jeopardy to the endangered fishes and avoid adverse modification of critical habitat, could not be implemented in 2001 because insufficient water is available to meet Upper Klamath Lake and Klamath River requirements. There is an insufficient supply water to fully provide for the needs of the threatened and endangered fish species in Project reservoirs and the Klamath River. The water supply for waterfowl, which is a major component of the food supply for resident and wintering bald eagles would be severely depleted. Lake elevations and river flows for 2001 would be adjusted by the Service and NMFS, in consultation with Tribes, in response to water available during this critically dry year. The lake elevations would be less than the minimum elevations specified in the Service's final B.O.'s and the river flows are the same as those described in NMFS's final B.O..

ESA Operation - The effects of this alternative on threatened and endangered species would be similar to those described under Proposed Operation.

Historic Operation - The effects of this alternative on threatened and endangered species would be similar to those described under Proposed Operation.

Limited Operation - The effects of this alternative on threatened and endangered species would be similar to those described under Proposed Operation.

Restricted Operation - The effects of this alternative on threatened and endangered species would be similar to those described under Proposed Operation.

Effects on Klamath Basin Indian Tribes

Proposed Operation - Under this alternative, the trust obligation of Reclamation to the Klamath Basin Indian Tribes could not be fully met. An adverse affect on tribal rights and trust assets would likely occur because ESA-mandated lake elevations and river flows could not be achieved due to unavailability of water in 2001.

ESA Operation - The effects of this alternative on Klamath Basin Indian Tribes would be similar to those described under Proposed Operation.

[8] Reclamation. 1998. Klamath Project 1998 Annual Operations Plan Environmental Assessment. Klamath Falls, Oregon.

Historic Operation - The effects of this alternative on Klamath Basin Indian Tribes would be similar to those described under Proposed Operation.

Limited Operation - The effects of this alternative on Klamath Basin Indian Tribes would be similar to those described under Proposed Operation.

Restricted Operation - The effects of this alternative on Klamath Basin Indian Tribes would be similar to those described under Proposed Operation.

Effects on Agricultural Water Users

Proposed Operation - Under this alternative, very little Project water would be available for agricultural water users during this critically dry year. Project water deliveries to most agricultural water users within the Project service area would be severely limited. Only about 70,000 acre-feet would be available for irrigation of "A" lands on the east side of the Project service area. A full supply of project would normally be about 508,000 acre-feet. This water would be supplied from Clear Lake and Gerber Reservoirs. Crop production would dramatically decline from recent outputs and gross crop value attributable to the Project (about $95 million in 2000) would be severely reduced. Estimated direct and indirect economic losses resulting from severely limited Project irrigation deliveries could range from approximately $133 million to $309 million [9] [10] [11]. Approximately 1,200 to 1,400 full-time farms [12] and about 184,000 acres receiving Project water would be affected. About 16,000 acres of lands served by Project water are participating in the pilot Demand Reduction Program in 2001 and will not use Project water for irrigation.

ESA Operation - The effects of this alternative on agricultural water users would be similar to those described under Proposed Operation.

Historic Operation - Under this alternative, historic Project water deliveries would be made to agricultural users. Those deliveries would be sufficient to irrigate up to approximately 200,000 acres. Some periodic shortages could occur due to unavailability of water, and operation under the approved Drought Plan may occur.

Limited Operation - Under this alternative, limited (about 60-70 % of historical demand) Project water deliveries would be made to agricultural users. Estimated direct and indirect economic losses resulting from limited irrigation deliveries could range from approximately $53 million to $110 million.

Restricted Operation - The effects of this alternative on agricultural water users would be similar to those described under Proposed Operation.

---

[9] Reclamation. 2001. April 2001 unpublished memo describing potential social-economic effects on agriculture in 2001. Klamath Falls, Oregon.

[10] Reclamation. 2001. March 2001 Programmatic Environmental Assessment of Pilot Programs Conducted under Authority of the Klamath Basin Water Supply Enhancement Act (P.L. 106-498), Irrigation Demand Reduction and Groundwater Acquisition Pilot Programs. Klamath Falls, Oregon.

[11] Reclamation. 2001. March 2001 Unpublished report titled Impacts of Loss of Water Supply and Irrigated Agriculture on the Klamath Project. Denver, Colorado.

[12] Reclamation. 2001. 1980-2000 Annual Crop Reports. Klamath Falls, Oregon.

Effects on National Wildlife Refuges

Proposed Operation - Under this alternative, Project water would be largely unavailable for the National Wildlife Refuges located within the Project boundaries. The water supply for waterfowl and the food supply for resident and wintering bald eagles would be severely depleted. Stored Project water from Gerber and Clear Lake Reservoirs would be used to meet evaporation needs in Tule Lake Sump 1A within the Tule Lake National Wildlife Refuge.

ESA Operation - The effects of this alternative on national wildlife refuges would be similar to those described under Proposed Operation.

Historic Operation - Historic Project water deliveries would be made to refuges. Some limited shortages may occur due to periodic unavailability of water as a result of the critical dry year. Refuge resources (waterfowl populations and habitat) would be minimally affected.

Limited Operation - Under this alternative, Reclamation would deliver 2,000 acre-feet/month to National Wildlife Refuges from April through October 2001. Refuge resources (waterfowl populations and habitat) would be affected - water deliveries would maintain minimum essential water supply and habitats for migrating waterfowl, which are the primary food supply for resident and migrating bald eagles.

Restricted Operation - The effects of this alternative on national wildlife refuges would be similar to those described under Proposed Operation.

TABLE 2

SUMMARY OF EFFECTS RESULTING FROM IMPLEMENTATION OF FIVE ALTERNATIVES FOR OPERATION OF THE KLAMATH PROJECT IN RESPONSE TO CRITICAL DRY CONDITIONS IN 2001

RESOURCE/ISSUE	ALTERNATIVE				
	Proposed Operation	ESA Operation	Historic Operation	Limited Operation	Restricted Operation
Threatened and Endangered Species	Operation jeopardizes the Lost River and shortnose suckers, and coho salmon. Operation would not jeopardize the bald eagle. Insufficient water to fully provide for the needs of the threatened and endangered fish species in Project reservoirs and the Klamath River during this critically dry year.	Effects would be similar to Proposed Operation.	Effects would be similar to Proposed Operation.	Effects would be similar to Proposed Operation.	Effects would be similar to Proposed Operation.
Klamath Basin Indian Tribes	Trust obligation to Klamath Basin Indian Tribes could not be fully met. Adverse affect on tribal rights and trust assets would likely occur because ESA-mandated lake elevations/river flows could not be achieved due to unavailability of water in 2001.	Effects would be similar to Proposed Operation.	Effects would be similar to Proposed Operation.	Effects would be similar to Proposed Operation.	Effects would be similar to Proposed Operation.
Agricultural water users	Project water deliveries would be severely limited; "A" lands would receive about 70,000 acre-feet from Clear Lake and Gerber Reservoirs. Crop production would severely decline. Est. direct and indirect economic losses could range from about $133 million to $309 million.	Effects would be similar to Proposed Operation.	Water deliveries would be made to agricultural users. Some periodic shortages could occur due to unavailability of water, and operation under the approved Drought Plan may occur.	Limited (60-70 % of historical demand) Project water deliveries would be made to agricultural users. Est. direct and indirect economic losses resulting from limited irrigation deliveries could be about $53 -110 million.	Effects would be similar to Proposed Operation.
National Wildlife Refuges	Project water would be largely unavailable for the National Wildlife Refuges. Water supply for waterfowl and the food supply for resident and wintering bald eagles would be severely depleted. Project water from Gerber and Clear Lake Reservoirs would be used to meet evaporation needs in Tule Lake Sump 1A.	Water deliveries should be made to Lower Klamath Refuge for protection of bald eagles and maintenance of wintering waterfowl populations. However, water would not be available for this purpose. Waterfowl populations and habitat would be adversely affected.	Historic Project water deliveries would be made to refuges. Some shortages may occur due to unavailability of water in this critically dry year. Refuge resources (waterfowl populations and habitat) would be minimally affected.	2,000 acre-feet/month delivered to refuges from April through October 2001. Refuges (waterfowl populations and habitat) would be affected - water deliveries would attempt to maintain minimum essential habitats for waterfowl.	Effects would be similar to Proposed Operation.

AGENCIES AND PERSONS CONSULTED

The following Tribes, agencies and organizations have been consulted during development of the proposal and alternatives:

U.S. Department of the Interior
- Fish and Wildlife Service
- Bureau of Indian Affairs
- Bureau of Reclamation

U.S. Department of Commerce
- National Marine Fisheries Service

Klamath Tribes
Karuk Tribe
Yurok Tribe
Hoopa Valley Tribe
Oregon Department of Water Resources
Oregon Department of Environmental Quality
Oregon Division of Fish and Wildlife
California Department of Fish and Game
Klamath Water Users Association
Langell Valley Irrigation District
Horsefly Irrigation District
Klamath County Commissioners
Modoc County Board of Supervisors
Siskiyou County Board of Supervisors
Oregon Natural Resource Council
Pacific Coast Fishing Federation
Klamath River Compact Commission